Message

From: d'Almeida, Carolyn K. [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=9EC4401AFA1846DD93D52A0DDA973581-CDALMEID]
Sent: 11/7/2018 10:08:55 PM
To: Wayne Miller [Miller.Wayne@azdeq.gov]
CC: steve [steve@uxopro.com]
Subject: RE: 2018-11-7 - wafb -thanks - benzene migration action level ST012 containment - Nov 2018 mwell locations & priority

I agree that ultimately the RODA requirements prevail on paper, but the taxpayers will ultimately get the bill, and future remedial options will be more limited and expensive if the plume extends under the airport tarmac (e.g. Honeywell M52 OU2 plume under Sky Harbor.) Also the 20 year time to MNA expectation is becoming less likely. I'm not content to let the plume migrate, at least not under my watch.

Carolyn d'Almeida
Remedial Project Manager
Federal Facilities Branch (SFD 8-1)
US EPA Region 9 Laboratory
1337 South 46th Street, Building 201
Richmond, CA 94804
(415) 972-3150

"We can evade reality, but we cannot evade the consequences of evading reality." - Ayn Rand

From: Wayne Miller <Miller.Wayne@azdeq.gov>
Sent: Wednesday, November 7, 2018 1:51 PM
To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Cc: steve <steve@uxopro.com>
Subject: 2018-11-7 - wafb -thanks - benzene migration action level ST012 containment - Nov 2018 mwell locations & priority

Thank you. It is understood that AMEC's 5 µg/l boundary is an imaginary line. It is also understood that AF maintains the historic notion the plume is not migrating. I appreciate the Containment Criteria re-fresher. The confusion seems to be that placing the Nov. 2018 wells closer to AMEC's assumed contamination line seems to be an intentional act to trigger containment extraction pumping. Presume benzene in GW at 15 µg/l when LSZ 1 installed. Remedy appears to default to Pump and Treat. (EBR placed on indefinite hold) Or does a step-out well contingency exist? My perception is AF may be frustrated at continued well install request.

I understand the MNA containment need. I appreciate EPA's work to minimize potential contaminant migration. I am not sure that all parties have made clear their expectations for MNA monitoring point locations and quantity.

ADEQ appreciates EPA's commitment to minimize the remedy time and impact. Based on ADEQ's experience at other AZ Superfund sites (Phoenix Goodyear Airport, Motorola 52nd Street, North Indian Bend Wash, etc.), ADEQ interprets that the USAF will similarly be held to the aquifer restoration legal agreement, regardless of plume size.

From: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Sent: Wednesday, November 07, 2018 1:20 PM
To: Wayne Miller <Miller.Wayne@azdeq.gov>
Cc: steve <steve@uxopro.com>
Subject: 2018-11-7 - wafb -ST012 containment - Nov 2018 mwell locations & priority - cda epa

Hi Wayne

There may be some confusion. These wells EPA is requesting are not for evaluating EBR efficacy, but for primarily for evaluating containment, in response to our letter last summer (see attached). AF has long maintained that the benzene plume is stable, not migrating. But the 5 ppb line is only inferred and the sentry wells that were installed are too far away to detect plume migration until it has already expanded some distance. MNA is not appropriate for an expanding groundwater plume. We want monitoring data to verify that the plume remains stable while EBR proceeds.

Carolyn d'Almeida
Remedial Project Manager
Federal Facilities Branch (SFD 8-1)
US EPA Region 9 Laboratory
1337 South 46th Street, Building 201
Richmond, CA 94804
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From: Wayne Miller <Miller.Wayne@azdeq.gov>
Sent: Wednesday, November 7, 2018 12:01 PM
To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Cc: steve <steve@uxopro.com>
Subject: 2018-11-7 - wafb - ADEQ Ok - ST012 mwell locations & priority-

ADEQ is OK with EBR efficacy monitoring well conceptual placement and priority. ADEQ does believe that all parties need to be *re-freshed* on the EBR efficacy monitoring points' intent and also on future monitoring well construction requests.
Specifically:

(1)

Cobble Zone Wells 1, 3, & 4 - [EPA] location OK and should be constructed by April 1, 2019.
ADEQ interprets that CZ EBR Well 2 may not be constructed.

Upper Water Bearing Zone Wells 1, 4, & 5 - [EPA] location OK and should be constructed by April 1, 2019
ADEQ interprets that UWBZ EBR Well 2 may not be constructed.

Lower Saturated Zone Wells 1, 3, & 4 - [EPA] location OK and should be constructed by April 1, 2019
ADEQ interprets that LSZ EBR Wells, 2, 6, & 7 may not be constructed.
ADEQ interprets that LSZ EBR Well 5 is eliminated.

(2) ADEQ interprets certain EBR efficacy wells could be collocated (based on the EPA hand sketch).
CZ 1 and LSZ 1
CZ 4 and LSZ 2 (if LSZ well constructed)
UWBZ 5 and LSZ 3

(3) ADEQ interprets certain EBR efficacy wells could be location adjusted to become collocated (based on the EPA hand sketch). The presumed adjustment distance appears less than 50 feet (Figure scale).
CZ 4 and UWBZ 4
CZ 2 and LSZ 4 (if CZ well constructed)
CZ 3 and LSZ 3

(4) ADEQ requests EPA provide a written purpose for each monitoring well. Are the prioritized monitoring wells solely for EBR efficacy assessment, for plume contaminant characterization or are the wells for site closure justification after Monitored Natural Attenuation implemented?

ADEQ understands that AFCEC has some concerns with regard to monitoring wells discussions (based on a Nov. 6, 2018 telephone call ADEQ received from AFCEC):

a) Is there an issue with beginning sulfate injection week of Nov. 11, 2018?
b) How many EBR efficacy monitoring wells must be constructed by April 1, 2019?
c) Could lower-priority wells be placed at later dates, if funded?
d) Will future characterization/MNA monitoring wells be demanded to be constructed [beyond the Oct. 2018 benzene concentration lines as interpreted from AMEC figures]?
e) What is timing for future wells (if any)?

ADEQ understood prior to Nov. 2, 2018 that the proposed EBR monitoring well construction discussion was emphasizing plume characterization, sentry well establishment (to monitor contaminant transport), and supplementing Monitored Natural Attenuation compliance points. However, ADEQ now interprets the above proposed monitoring wells emphasize EBR efficacy evaluation. This would indicate, to ADEQ, that an undetermined quantity of additional wells could be requested during EBR and MNA time frames to provide plume characterization, sentry well establishment (to monitor contaminant transport), and supplementing Monitored Natural Attenuation compliance points. Please clarify, to ADEQ, if ADEQ is not clear on the proposed EBR efficacy monitoring wells' multi-facet uses.

Thanks.

Wayne Miller
Waste Programs Division,
Remedial Projects Section,
Federal Projects Unit

Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, AZ 85007

Direct Line: 602.771.4121
Email: miller.wayne@azdeq.gov

From: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Sent: Tuesday, November 06, 2018 1:15 PM
To: JERRARD, CATHERINE V CIV USAF HAF AFCEC/CIBW <catherine.jerrard@us.af.mil>
Cc: Wayne Miller <Miller.Wayne@azdeq.gov>; Davis, Eva <Davis.Eva@epa.gov>; 'Brasaemle, Karla' <KBrasaemle@TechLawInc.com>; Smallbeck, Donald R. <donald.smallbeck@woodplc.com>
Subject: 2018-11-6 - wafb - EPA edits - ST12 monitoring well locations and priority- cda epa

Hi Cathy

As we discussed on the call last Friday, please see attached EPAs edits to the well location figure and table. We were unable to modify the graphics in the figure so edits are made by hand. Please call if you have any questions. Thank you.

Carolyn d'Almeida
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Federal Facilities Branch (SFD 8-1)
US EPA Region 9 Laboratory
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